LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1-21. (Canceled).
- 22. (Previously presented) A polythioether comprising:

$$H - S - R^1 - [-S - CH_2 - CH_2 - O - (-R^2 - O -)_m - CH_2 - CH_2 - S - R^1 -]_n - S - H$$
 wherein

 R^1 is selected from the group consisting of C_{2-6} n-alkylene, and a $-[(-CH_2)_p-X]_q-(-CH_2)_r-$ group;

 R^2 is selected from the group consisting of $C_{2\text{-}6}$ n-alkylene, and $C_{6\text{-}8}$ cycloalkylene;

X is selected from the group consisting of O and S;

m is an integer between 0 and 10;

p is an integer between 2 and 6;

q is an integer between 1 and 5;

r is an integer between 2 and 10; and

n is an integer between 1 and 60 selected so that the molecular weight of the polythioether is between 1,000 and 10,000 Daltons.

23. (Previously presented) The polythioether of claim 22 wherein R¹ is C₂-C₆ n-alkylene.

- 24. (Previously presented) The polythioether of claim 22 where R^1 is $-[(-CH_2-)_p-O-]_q-(-CH_2-)_r$ where r, p, and q are 2.
- 25. (Previously presented) The polythioether of claim 22 wherein R^2 is C_2 alkylene.
- 26. (Previously presented) The polythioether of claim 22 wherein the molecular weight of said polythioether ranges from about 2000 to about 5000 Daltons.
- 27. (Previously presented) The polythioether of claim 22 having an atomic percentage ratio of C:S:O of 35-49: 20-60: 0-20.

28-30. (Canceled)

31. (Previously presented) A mixture of polythioether polymers comprising: a polythioether polymer having the formula

$$B - \{-S - R^1 - [-S - CH_2 - CH_2 - O - (R^2 - O)_m - CH_2 - CH_2 - S - R^1]_n - S - \ H \ \}_z$$
 wherein

 R^1 is selected from the group consisting of C_{2-6} n-alkylene, and a $-[(-CH_2)_p-X]_q-(-CH_2)_r$ group;

 R^2 is selected from the group consisting of C_{2-6} n-alkylene, and C_{6-8} cycloalkylene;

X is selected from the group consisting of O and S;

m is an integer between 1 and 10;

p is an integer between 2 and 6;

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q is an integer between 1 and 5;
r is an integer between 2 and 10;
z is an integer from 3 to 6;
B is a z-valent group of a polyfunctionalizing agent; and
n is an integer between 1 and 60 selected so that the molecular weight of the
polythioether is between 1,000 and 10,000 Daltons.
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- 32. (Previously presented) The polythioether mixture of claim 31 wherein z is 3.
- 33. (Previously presented) The polythioether mixture of claim 31 wherein the mixture has an average functionality between 3 and 4.
- 34. (Previously presented) The polythioether mixture of claim 31 wherein the average functionality is between 2.05 and 3.00.
- 35. (Currently amended) A curable composition comprising:
 40 to 80 weight percent of a polythioether polymer according to claim 22,
 10 5 to 50 60 weight percent of a filler and 10 weight percent of a curing agent.
- 36. (Previously presented) The curable composition of claim 35 further comprising one or more additives selected from the group consisting of: pigments, cure accelerators, adhesion promoters, thixotropic agents and isopropyl alcohol.

37-40. (Canceled).

- 41. (Previously presented) The polythioether of claim 22, wherein r is an integer between 2 and 6, R^2 is C_{2-6} n-alkylene, and m, p and q are each 2.
- 42. (Previously presented) The polythioether mixture of claim 31, wherein, r is an integer between 2 and 6, R^2 is C_{2-6} n-alkylene, and m, p and q are each 2.
- 43. (Currently amended) A curable composition comprising: 40 to 80 weight percent of a polythioether polymer according to claim 41, $\underline{10}$ 5 to $\underline{50}$ 60 weight percent of a filler and 10 weight percent of a curing agent.
- 44. (New) The curable composition of claim 43 which includes from about 0.1 to about 5 weight percent based upon the total weight of formulation of fumed silica.
- 45. (New) The curable composition of claim 43 wherein the filler comprises carbon black.
- 46. (New) The curable composition of claim 43 wherein the filler comprises calcium carbonate.
- 47. (New) A curable composition comprising: 40 to 80 weight percent of a polythioether polymer according to claim 22, 10 to 50 weight percent of a filler, and 90% to about 150% of the stoichiometric amount of a curing agent based upon -SH equivalents.

48. (New) The curable composition of claim 46 which comprises about 47 weight percent polythioether polymer, about 0.7 weight percent of amorphous silica, about 34 weight percent calcium carbonate, and about 7 weight percent curing agent, based on the total weight of the composition formulation.